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| --- | --- |
| **Activity:** | **High Rise Buildings over 18 Metres - ORA** |
| **Work Area / Location: Operational Incidents** |
| **Likelihood of Hazardous Event:** | 1 = Very unlikely | 2 = Unlikely | 3 = May happen | 4 = Likely | 5 = Imminent |
| **Severity of Consequence:** | 1 = Minor delay | 2 = Minor injury | 3 = Up to 7 day loss | 4 = Over 7 day loss/major injury | 5 = Fatality |
| **LIKELIHOOD x SEVERITY = RISK FACTOR** | **RISK RATING** |
| **Risk Rating** | 1-11 = | **Low** | 12-19 = | **Medium** | 20-25 = | **High** | **LOW** | Review at least every 2 years |
| **MEDIUM** | Additional controls if reasonably practicable. Review regularly |
| **HIGH** | Urgent action required, where residual risk is identified in this category, all reasonably practicable controls must have been considered |

| **HAZARD** | **HAZARDOUS EVENT** | **Level of Risk**Initial Risk without control measures | **RISK CONTROLS**(What action is necessary?) | **Level of Risk**Residual Risk with control measures |
| --- | --- | --- | --- | --- |
| (What could potentially cause harm?) | Who might be harmed | How might they be harmed?(Most likely outcome NOT worst possible case) | **Likelihood** | **Severity of Consequence** | **Risk Factor** | **Risk Rating** | **Likelihood** | **Severity of Consequence** | **Risk Factor** | **Residual Risk Rating** |
| **Fire Spread** | FRS personnelOther agenciesOccupants | Injury or Death by burning | **5** | **5** | **25** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots, flash hood, BA gloves and helmet
* Breathing Apparatus (BA)

**Procedures*** Identification of construction type and cladding materials during Operational Intelligence System (OIS) visits and recording on Site Specific Risk Information (SSRI)
* During OIS visits – noting and reporting defective or missing fire protection measures and/or incorrect materials being used to separate compartments
* Consider early evacuation if there is external fire spread or if the building is behaving in a manner not normally expected
* Consider early evacuation if the fire involves lightweight structural elements
* Deploy personnel in BA when operating above the Bridgehead
* Identify location of fire
* Information from Fire Control (FC)
* Question occupants, staff and witnesses
* Review alarm indicator panels and zone maps
* Internal scene survey with Thermal Imaging Camera (TIC)
* Use of TICs by Breathing Apparatus (BA) wearers
* External scene survey with TIC
* Identify the seat of the fire and check all adjacent areas
* Control and extinguish fire
* Early application of water to control fire growth
* Attack and extinguish the fire
* Contain the fire and defend protected routes
* Placement of safety officers (external and on protected routes)
* Consider hidden fire spread
* Protect and secure evacuation routes
* Deploy stairwell protection teams with gas detectors for early warning of smoke
* Deploy portable smoke curtains

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Firefighting Tactics Guidance
 | **4** | **4** | **16** |  |
| **Smoke Spread** | FRS personnelOther agenciesOccupants  | Injury or death cause by smoke inhalation | **5** | **5** | **25** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots, flash hood, BA gloves and helmet
* Deploy personnel in BA when operating above the Bridgehead

**Procedures*** Consider early evacuation if there are large volumes of smoke with the potential to affect other residents
* OIS SSRI and high rise initial considerations
* Question occupants, staff and witnesses
* Review alarm indicator panels and zone maps
* Internal scene survey with TIC
* External scene survey with TIC
* Identify all areas affected by smoke or gases (use gas monitor)
* Protect and secure the evacuation routes
* Contain the smoke
* Deploy portable smoke curtains to control smoke spread during operations
* Deploy stairwell protection teams with gas detectors for early warning of smoke
* Consider the benefit of automatic / manual smoke control equipment
* Consider hidden smoke spread
* Deploy smoke hoods for use by occupants when evacuating

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Fire Science Guidance
 | **4** | **4** | **16** |  |
| **Unstable Structure** | FRS personnelOther agenciesOccupants | Injury or death caused by collapsed structures or falling masonry / structural elements | **3** | **5** | **15** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** External scene survey
* Internal scene survey
* Placement of safety officers (external) to monitor building for signs of collapsed
* Establish appropriate sized safety cordons
* Consider potential collapse footprint
* Consider appliance positioning
* Secure safe access and egress routes
* Re-route or provide alternative water supplies
* Consider the effect of fire on building structure
* Consider advice from Local Authority (LA) Building Control

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Fire in Buildings Guidance
 | **3** | **3** | **9** |  |
| **Cable Entanglement** | FRS Personnel  | Injury or death caused by entanglement and inability to release oneself | **3** | **5** | **15** |  |  **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots
* Cable cutters on BA sets
* Anti-entanglement cylinder guards fitted to BA sets

**Procedures*** Correct use of BA procedures to avoid entanglement
* Correct use of Cable cutters on BA sets to remove entanglement hazard

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Training in anti-entanglement procedures
 | **2** | **4** | **8** |  |
| **Wall Panel Failure** | FRS personnelOther agenciesOccupants | Injury or death caused by falling panels from height | **3** | **5** | **15** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Identification of construction type during OIS visits and recording on SSRI
* External scene survey with TIC
* Use of a TIC by committed teams
* Effective briefing and debriefing of committed teams
* Effective communications with committed teams
* Establish appropriate sized safety cordons
* Placement of safety officers (external) to monitor building for panel failure or detachment
* Consider work restraint during post-fire activities

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months

Fires in Buildings Guidance  | **3** | **3** | **9** |  |
| **Extended Lines of Communication** | FRS Personnel | Increased risk of injury due to lack of situational awareness cause by loss of communications | **4** | **3** | **12** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Robust communications testing during OIS visits and recording on SSRI
* Robust implementation of the ICS
* Nominated radio channels
* Nominate BA Communications operatives
* Frequent radio checks during the incident
* Deployment / activation of fixed or portable repeaters and leaky feeders
* Use of appliance mobile phones
* Additional resources to act as ‘runners’
* Consider confined space line communications
* Familiarisation of on-site communication systems

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* BA communications training
 | **3** | **3** | **9** |  |
| **Building Security** | FRS personnelOccupants | Injury or death due to FRS - delayed entry leading to extended periods for fire growthOccupants – delayed exit leading to them being caught in fire or smoke | **3** | **4** | **12** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots
* Breaking in gear

**Procedures*** Identification and recording of security measures during OIS visits and recording on SSRI
* Obtain keys / codes and key holder details during OIS visits and record on SSRI
* Identify appropriate access and egress routes
* Maintain control of access and egress routes once established
* Identify safest and simplest methods of gaining entry

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Methods of entry
 | **2** | **3** | **6** |  |
| **Complexity of Internal layout** | FRS personnelOccupants | Injury or death due to FRS - delayed entry leading to extended periods for fire growth or losing sense of location / directionOccupants – delayed exit due to losing sense of location / direction leading to them being caught in fire or smoke | **4** | **4** | **16** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots
* Breaking in gear

**Procedures*** Obtain and record detailed building layout, flat numbering plans and firefighting shaft and lift locations during OIS and visits and record on SSRI
* Question occupants, staff and witnesses
* Review on-site premises information boxes
* Review alarm indicator panels and zone maps
* If the fire location is uncertain, approach cautiously using protected routes if available
* If travelling in lifts, take control of the lift and exit a minimum of two floors below the fire
* Internal scene survey with TIC
* Effective briefing and debriefing of committed teams
* Use of TIC by committed teams

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Methods of entry
 | **2** | **4** | **8** |  |
| **Failure of fixed installations, engineered solutions and firefighting facilities**  | FRS personnelOccupants | Injury or death due to Failure of fire protection measures | **4** | **4** | **16** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Obtain and record information on the function and operation of fixed installations during OIS visits
* Consider joint inspections between operational personnel, Fire Safety Enforcement Officers (FSEO) and building managers
* Make accurate plans of the location of installations and their controls
* Secure support from on-site advisors
* Review on-site premises information boxes
* Do not operate fixed installations (on or off) without an understanding of their function and an expectation of how the building will be affected
* Request attendance of an FSEO for advice on the function and operation of fire protection features
* Consider alternative means of supply water to the fire sector if fire mains are defective or insufficient

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Fires in Buildings Guidance
 | **2** | **3** | **6** |  |
| **Construction or Refurbishment** | FRS personnelOccupants | Injury or death due to Lack of fire protectionUnexpected smoke or fire spreadUnrestricted fire spreadStructural collapse earlier than anticipated or expected | **4** | **4** | **16** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Secure support from on-site advisors
* Review on-site premises information boxes
* Caution that the building may not perform as expected
* Consideration of early structural collapse
* Consideration of a defensive tactical mode

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Fires in Buildings Guidance
 | **4** | **2** | **8** |  |
| **Congestion of Access and Egress routes**  | FRS personnelOccupants | Injury or death caused by residents unable to evacuate. Due to:restricted access and egress residents on stairwellsdebrisequipment  | **3** | **5** | **15** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Consideration of current firefighting tactics on the evacuation strategy
* Consideration of current evacuation strategy on firefighting operations
* Early consideration of amending the evacuation strategy to simultaneous evacuation
* Early review of available resources
* Consider sending a *Immediate Building Evacuation* (IBE) message, for additional resources and so FC can change their Fire Survival Guidance (FSG)
* Consideration of alternative access points or routes for fire service personnel
* Consider nominating multiple staircases for specific functions such as firefighting operations or evacuation
* Wherever possible, firefighting operations should not restrict or create hazards on evacuation routes
* Protect and secure the evacuation routes
	+ Deploy stairwell protection teams with gas detectors for early warning of smoke
	+ Deploy portable smoke curtains

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
 | **3** | **3** | **9** |  |
| **Physical Workload** | FRS Personnel | Exhaustion or Heat Stress caused by over-exertion | **4** | **3** | **12** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Identify the safest and most direct access and egress routes
* Secure and use firefighting lifts for transporting personnel, equipment and casualties
* Provision of dedicated personnel for logistics, transporting equipment and casualties
* Personnel to get to work from ‘safe air’ in unaffected locations, as close to the fire as possible, making effective use of fire doors and compartmentation
* Rotation of personnel that are working hard
* Consider provision of early reliefs

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* BA Guidance - “Physiology and Psychology’ and ‘Welfare of BA Wearers’
 | **3** | **2** | **6** |  |
| **Persons shut in lifts** | FRS Personnel | Injury or death due to being marooned in a lift without BA or firefighting media as the fire develops outside | **3** | **5** | **15** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Identify and record lift locations and instructions during OIS visits and record on SSRI
* Secure support from on-site advisors
* Review on-site premises information boxes
* Secure firefighting lifts for operational use
* Call other lifts to the ground to be cleared
* Prioritise lift rescues if cars become stuck
* Protect areas around the lift shaft from fire and smoke ingress

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
* Lifts and Escalators SOP
 | **2** | **4** | **8** |  |
| **Casualty Management** | FRS Personnel | Physical injury or exhaustion  | **4** | **3** | **12** |  | **Knowledge*** Buildings over 18 metres Standard Operating Procedure (SOP) and SOP Action Card
* 7.2(d) and Site Specific Risk Information (SSRI)

**Equipment*** Full firefighting kit including mid layer and outer layer jacket, over trousers, fire boots

**Procedures*** Use firefighting lifts to transport casualties
* Provide dedicated personnel for casualty retrieval
* Rotate personnel that are working hard
* Use casualty carrying equipment such as stretchers or carry sheets
* Establish casualty clearing points in Staging Areas
* Handover casualty management to North West Ambulance Service (NWAS) / Hazardous Area response Teams (HART)

**Training*** Buildings over 18 metres eLearning packages to be completed by all operational personnel every 6 months
 | **3** | **2** | **6** |  |

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| **Other assessments required:** | **NOISE** | **C O S H H** | **D S E** | **Manual Handling** | **Others** |
|  |  |  |  |  |
| **Signed Assessor:** | **Print Name:** | **Date:** Click here to enter a date. |

Risk Assessment Briefing Record Sheet

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| **Risk Assessment No:** | **Activity: High Rise Buildings over 18 Metres - ORA** |
| Work Area / Location |

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| --- |
| *Signing this form constitutes a declaration that you have fully understood the contents of the briefing given* |
| **Employee Name** | **Employee Signature** | **Name of Person Giving Briefing** | **Signature of Person Giving Briefing** | **Date of Briefing** |
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